

The Applicants acknowledge the Examiner's highly constructive Office Action with appreciation. Claims 1-24 remain under consideration.

The Office Action begins with a series of rejections as to form. The Examiner objects to the phrase (1-6C). With this Response and Amendment, the applicants have amended Claim 1 to use the language "C<sub>1</sub>-C<sub>6</sub>". If the Examiner has further objections to this language, the applicants respectfully request guidance.

Under 35 USC § 112, second paragraph, the Examiner rejects a variety of claims for failing to claim with particularity. The Examiner suggests there is no antecedent basis for the limitation "x is 4 or 5" in Claims 12-13. On review, the applicants point out that Claim 1 defines x as "2 to 5, inclusive" in the fourth to last line. Thus, this issue is obviated.

Claims 18-24 are rejected under 35 USC § 112, second paragraph, and 35 USC § 101 for indefiniteness for failing to set forth the steps involved in the "process" of the claims. These claims have been cancelled as redundant on the Method-of-Treating claims.

Finally, all claims are rejected under 35 USC § 102(e) as being anticipated by the disclosure of Gold, et al., WO 99/01416 A2, published January 1999. This published PCT application corresponds to US Application Serial No. 08/885,944. The Examiner concludes that the instant claims to a Method-of-Treating conditions alleviated by a 5HT<sub>3</sub> or neuronal nicotinic receptor antagonist are inherent in the publication's disclosure of treating the same diseases with the same compounds as NMDA receptor antagonists. The Examiner's theory is that

treatment of these diseases, through any mechanism, is inherent or not surprising based on the earlier disclosure.

The applicants respectfully disagree that claims to a Method-of-Treating conditions alleviated by a 5HT<sub>3</sub> or neuronal nicotinic receptor antagonist are inherent in the publication's disclosure of treating the same diseases with the same compounds as NMDA receptor antagonists. Many of the diseases contemplated to be treated are under intensive research to clearly define the exact mechanism of action involved in their etiology. What is more, many of these diseases are being divided into subtypes, based on the mechanism which contributes to a specific aspect of the disease. As evidence of this fact, the applicants submit a recent publication which states specifically that the same compounds may be acting at various receptors, such receptor activity being combined in a synergistic effect to promote treatment of these CNS disorders. See The N-methyl-D-aspartate receptor channel blockers memantine, MRZ 2/579 and other amino-alkyl-cyclohexanes antagonise 5-HT3 receptor currents in cultured HEK-293 and N1E-115 cell systems in a non-competitive manner, Neuroscience Letters 306 (2001) 81-84, attached hereto.

Thus, it is submitted that the inherency argument is rebutted by evidence of the fact that various of the disease states contemplated to be treated may be under the control of multiple receptor mechanisms. Claims to treatment of these disease states, albeit with the same compounds, relate to specific receptors which claims are not inherently anticipated, but rather novel and unobvious from the art as it existed at the time of filing. Reconsideration and withdrawal of the rejections for lack of novelty are respectfully solicited.

\* \* \* \* \*

Accordingly, entry of the present amendment, reconsideration of all grounds of objection and rejection, withdrawal thereof, and passage of this application to issue are all hereby respectfully solicited.

It should be apparent that the undersigned attorney has made an earnest effort to place this application into condition for immediate allowance. If he can be of assistance to the Examiner in the elimination of any possibly-outstanding insignificant impediment to an immediate allowance, the Examiner is respectfully invited to call him at his below-listed number for such purpose.

Allowance is solicited.

Respectfully submitted,

THE FIRM OF HUESCHEN AND SAGE

By:

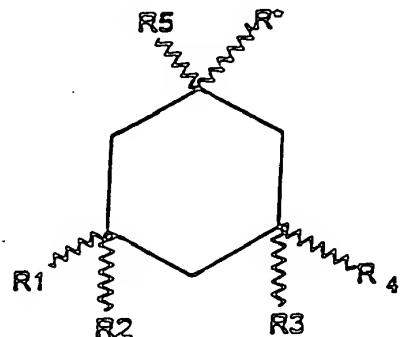
  
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Enclosure: Postal Card Receipt,  
claims amendments,  
PTO-1449 with reference,  
Extension and fee.

- 1 - (marked-up)

A method-of-treating a living animal for inhibition of progression or alleviation of a condition which is alleviated by a 5HT<sub>3</sub> or neuronal nicotinic receptor antagonist, comprising the step of administering to the said living animal an amount of a 1-aminoalkylcyclohexane compound selected from the group consisting of those of the formula

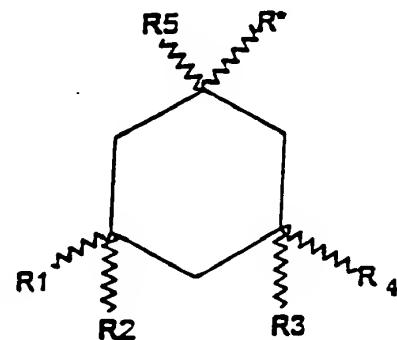


wherein R\* is -(CH<sub>2</sub>)<sub>n</sub>-(CR<sup>6</sup>R<sup>7</sup>)<sub>m</sub>-NR<sup>8</sup>R<sup>9</sup>

wherein n + m = 0, 1, or 2

wherein R<sup>1</sup> through R<sup>7</sup> are independently selected from the group consisting of hydrogen and lower-alkyl C<sub>1</sub>-C<sub>6</sub> [ (1-6C) ], wherein R<sup>8</sup> and R<sup>9</sup> are independently selected from the group consisting of hydrogen and lower-alkyl C<sub>1</sub>-C<sub>6</sub> [ (1-6C) ] or together represent lower-alkylene -(CH<sub>2</sub>)<sub>x</sub>- wherein x is 2 to 5, inclusive, and optical isomers, enantiomers, hydrates, and pharmaceutically-acceptable salts thereof, which is effective for the said purpose.

A method-of-treating a living animal for inhibition of progression or alleviation of a condition which is alleviated by a  $5HT_3$  or neuronal nicotinic receptor antagonist, comprising the step of administering to the said living animal an amount of a 1-aminoalkylcyclohexane compound selected from the group consisting of those of the formula



wherein  $R^*$  is  $-(CH_2)_n-(CR^6R^7)_m-NR^8R^9$

wherein  $n+m = 0, 1, \text{ or } 2$

wherein  $R^1$  through  $R^7$  are independently selected from the group consisting of hydrogen and lower-alkyl  $C_1-C_6$ , wherein  $R^8$  and  $R^9$  are independently selected from the group consisting of hydrogen and lower-alkyl  $C_1-C_6$  or together represent lower-alkylene  $-(CH_2)_x-$  wherein  $x$  is 2 to 5, inclusive, and optical isomers, enantiomers, hydrates, and pharmaceutically-acceptable salts thereof, which is effective for the said purpose.